

Serial No. 09/836,003

PATENT  
Docket No. 58598-010100**FOR DISCUSSION PURPOSE ONLY****AMENDMENTS TO THE CLAIMS**

The listing of claims will replace without prejudice, all prior versions, and listings, of claims in the application

**Claims 1 – 29 (cancelled)**

**Claim 30 (currently amended):** A process for producing products in a powdered form comprising:

directing particulate matter into a pellet mill, the particulate matter being in a first powdered form and having a first density;

generating pellets of the particulate matter in substantial absence of fillers, diluents or binders; and

milling the pellets into a second powdered form, whereby the second powdered form of the particulate has a greater density than the first density.

**Claim 31 (cancelled)**

**Claim 32 (previously presented):** A process as claimed in claims 30 including introducing hydration into the pellet mill during formation of pellets.

**Claim 33 (previously presented):** A process as claimed in claim 30 including ensuring that the particulate matter includes material for at least one of pharmaceutical, nutritional or herbal end product.

**Claim 34 (previously presented):** A process as claimed in claim 30 including applying hydration at a selected temperature and pressure and condensation characteristic to the pellet mill during pelletization thereby to increase the moisture content of the product.

**Claim 35 (previously presented):** A process as claimed in claim 34 including ensuring that the product with increased moisture content is forced under pressure through a spinning perforated die of a predetermined dimension thereby to obtain a pellet of a selected size, and means for

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effecting the forcing through the die being effected selectively by counter rotating inner roller means.

**Claim 36 (previously presented):** A process as claimed in claim 35 including cooling the pellets to a substantially ambient temperature prior to being milled by the milling means.

**Claim 37 (previously presented):** A process as claimed in claim 30 including pre-milling for processing raw materials to obtain a particulate matter for feeding into the pellet mill.

**Claim 38 (previously presented):** A process as claimed in claim 30 including ensuring that the size of a particulate in the first form is greater than about 150 microns.

**Claim 39 (previously presented):** A process as claimed in claim 30 including conditioning the particulate material in a conditioning chamber thereby to be penetrated by at at least about 95% hydration under a pressure of about 40 to about 80 PSI thereby to hydrate the particulate matter and thereby add about 1% moisture to the particulate matter.

**Claim 40 (previously presented):** A process as claimed in claim 39 including cooling an outlet from a pellet mill for permitting ambient air to pass through a bed containing pellets discharged from the pelletizing mill.

**Claim 41 (previously presented):** A process as claimed in claim 30 including ensuring that the milled pellets output in a powdered form has an approximate size between about 100 to about 1300 microns, or of a size where essentially most of the powdered product is between a 14 mesh to a 150 mesh.

**Claim 42 (previously presented):** A process as claimed in claim 30 including ensuring that the powdered form of the milled product has a particle size permitting about 100% passage through a 60 to 80 mesh.

**Claim 43 (currently amended):** A process for producing pharmaceutical, nutritional or herbal end powdered product, wherein the density of the pharmaceutical nutritional or herbal powdered and product in a powdered form is increased comprising:

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directing particulate matter that constitute a pharmaceutical nutritional or herbal powdered end product into a pellet mill, the particulate matter being in a first powdered form and having a first density;

generating pellets of the particulate matter for constituting the pharmaceutical, nutritional or herbal powdered end product in a substantial absence of filler, binders or binders; and

milling the pellets into a second powdered form whereby the second powdered form of the particulate for constituting the pharmaceutical, nutritional or herbal powdered end product has a greater density than the first density.

**Claim 44 (cancelled)**

**Claim 45 (previously presented):** A process as claimed in claim 43 including applying hydration at a selected temperature and pressure and condensation characteristic to the pellet mill during pelletization thereby to increase the moisture content of the product.

**Claim 46 (previously presented):** A process as claimed in claim 45 including ensuring that the product with increased moisture content is forced under pressure through a spinning perforated die of a predetermined dimension thereby to obtain a pellet of a selected size, and means for effecting the forcing through the die being effected selectively by counter rotating inner roller means.

**Claim 47 (previously presented):** A process as claimed in claim 46 including cooling the pellets to a substantially ambient temperature prior to being milled.

**Claim 48 (previously presented):** A process as claimed in claim 43 including pre-milling for processing raw materials to obtain a particulate matter for feeding into the pellet mill.

**Claim 49 (previously presented):** A process as claimed in claim 43 including ensuring that the size of particulate in the first form is greater than about 150 microns.

**Claim 50 (previously presented):** A process as claimed in claim 43, including conditioning the product to ensure that the particulate material is penetrated by at least 95% hydrates under a

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pressure of about 40 to about 80 PSI thereby to hydrate the particulate matter and thereby add about 1% moisture to the particulate matter.

**Claim 51 (previously presented):** A process as claimed in claim 50 including cooling at an outlet from the pelletizing mill for permitting ambient air to passation on a bed containing pellets discharged from the pellet mill.

**Claim 52 (previously presented):** A process as claimed in claim 43 including ensuring that the milled pellets output has an approximate size between about 100 to about 1300 microns, or of a size where essentially most of the product is between a 14 mesh to a 150 mesh.

**Claim 53 (previously presented):** A process as claimed in claim 43 including ensuring that the powdered form of the milled product has a particle size permitting about 100% passage through a 60 to 80 mesh.

**Claim 54 (currently amended):** A process for forming a pharmaceutical, nutritional or herbal powdered end product wherein the density of pharmaceutical, nutritional or herbal powdered end product in a powdered form is increased comprising:

directing particulate matter to constitute a pharmaceutical, nutritional or herbal powdered end product into a pelletizing mill, the particulate matter being in a first powdered form and having a first density;

generating pellets of the particulate matter for constituting the pharmaceutical nutritional herbal end product in substantial absence of fillers, diluents or binders; and

milling the pellets into a second powdered form for the pharmaceutical, nutritional or herbal powdered end product , the second powdered form having a second density greater than the first density, and

~~preventing the additional fillers and diluents to the pharmaceutical, nutritional or herbal powdered end product matter thereby to provide a pharmaceutical, nutritional or herbal powdered end product having a density greater than at least from about 14% to about 40%~~

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relative to a standard pharmaceutical, nutritional or herbal powdered end product where said pellets are generated in presence of the fillers diluents or binders

**Claim 55 (currently amended):** A milled product ~~produced~~ obtainable by the a process of claim 30 wherein the density of the particulate matter in the second powdered form is of a relatively greater density than in the form prior to being generated into a pellet for producing products in a powdered form comprising: directing particulate matter into a pellet mill, the particulate matter being in a first powdered form and having a first density; generating pellets of the particulate matter in substantial absence of fillers, diluents or binders; and milling the pellets into a second powdered form, whereby the second powdered form of the particulate has a greater density than the first density.

**Claim 56 (cancelled):**

**Claim 57 (currently amended):** A milled product ~~produced~~ obtainable by the a process of claim 33 wherein the density of the particulate matter in the second powdered form is of a relatively greater density than in the form prior to being generated into a pellet for producing products in a powdered form comprising: directing particulate matter into a pellet mill, the particulate matter being in a first powdered form and having a first density; generating pellets of the particulate matter in substantial absence of fillers, diluents or binders; and milling the pellets into a second powdered form, whereby the second powdered form of the particulate has a greater density than the first density, further comprising ensuring that the particulate matter includes material for at least one of pharmaceutical, nutritional or herbal end product.

**Claim 58 (currently amended):** A milled product ~~produced~~ obtainable by the a process of claim 38 wherein the density of the particulate matter in the second powdered form is of a relatively greater density than in the form prior to being generated into a pellet for producing products in a powdered form comprising: directing particulate matter into a pellet mill, the particulate matter being in a first powdered form and having a first density; generating pellets of the particulate matter in substantial absence of fillers, diluents or binders; and milling the pellets into a second powdered form, whereby the second powdered form of the particulate has a greater density

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than the first density, further comprising ensuring that the size of a particulate in the first form is greater than about 150 microns.

**Claim 59 (currently amended):** A milled product produced obtainable by the a process of claim 41 wherein the density of the particulate matter in the second powdered form is of a relatively greater density than in the form prior to being generated into a pellet for producing products in a powdered form comprising: directing particulate matter into a pellet mill, the particulate matter being in a first powdered form and having a first density; generating pellets of the particulate matter in substantial absence of fillers, diluents or binders; and milling the pellets into a second powdered form, whereby the second powdered form of the particulate has a greater density than the first density; further comprising ensuring that the milled pellets output in a powdered form has an approximate size between about 100 to about 1300 microns, or of a size where essentially most of the powdered product is between a 14 mesh to a 150 mesh.

**Claim 60 (currently amended):** A milled product produced obtainable by the a process of claim 42 wherein the density of the particulate matter in the second powdered form is of a relatively greater density than in the form prior to being generated into a pellet for producing products in a powdered form comprising: directing particulate matter into a pellet mill, the particulate matter being in a first powdered form and having a first density; generating pellets of the particulate matter in substantial absence of fillers, diluents or binders; and milling the pellets into a second powdered form, whereby the second powdered form of the particulate has a greater density than the first density; further comprising ensuring that the powdered form of the milled product has a particle size permitting about 100% passage through a 60 to 80 mesh.

**Claim 61 (currently amended):** A milled product produced obtainable by the a process of claim 54 wherein the density of the particulate matter in the second powdered form is of a relatively greater density than in the form prior to being generated into a pellet. process for forming a pharmaceutical, nutritional or herbal powdered end product wherein the density of pharmaceutical, nutritional or herbal powdered end product in a powdered form is increased comprising: directing particulate matter to constitute a pharmaceutical, nutritional or herbal powdered end product into a pelletizing mill, the particulate matter being in a first powdered

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form and having a first density; generating pellets of the particulate matter for constituting the pharmaceutical nutritional herbal end product in substantial absence of fillers, diluents or binders; and milling the pellets into a second powderized form where the pharmaceutical, nutritional or herbal powderized end product, the second powderized form having a second density greater than the first density, to provide a pharmaceutical, nutritional or herbal powderized end product having a density greater than at least from about 14% to about 40% relative to a pharmaceutical, nutritional or herbal powderized end product where said pellets are generated in presence of fillers, diluents or binders.

**Claim 62 (new):** A process for producing a product in a powderized form comprising:

directing particulate matter into a peller mill, the particulate matter being in a first powderized form and having a first granularity;

generating pellets of the particulate matter in substantial absence of fillers, diluents or binders; and

milling the pellets into a second powderized form, whereby the second powderized form of the particulate matter has a greater granularity than the first granularity.

**Claim 63 (new):** The process of claim 62, wherein the particulate matter is selected from the group consisting of particulate matter of whole plants, leaves, roots, dried fruits and active pharmaceuticals.

**Claim 64 (new):** The process of claim 63, wherein the particulate matter of whole plant, root, leaf and dried fruit, is particulate matter from a plant selected from the group consisting of Ginko, Korean ginseng, Echinacea purpurea, Gota Kola, Valerian Officinalis, Siberian ginseng, Feverfew, Astragalus, Red Raspeberry, Foti, Alfalfa, Ginger, Black Cohosh, Cat's Claw, Nettle, St John Wort, Echinacea Angustifolia and Red Clover.

**Claim 65 (new):** The process of claim 62, wherein the particulate matter is selected from the group consisting of Ginkgo leaf, Korean Ginseng root, Echinacea Purpurea herb, Gota kola herb, Valerian Officinalis root, Siberian Ginseng root, Feverfew herb, astragalus root, Red Raspberry

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leaf, Foti root, Alfalfa herb, Ginger root, Black Cohosh root, Cat's claw root, Nettle root, St. John Wort herb, Echinacea Angustifolia root and Red Clover tops.

**Claim 66 (new):** A milled product obtainable by a process for producing a product in a powdered form comprising:

directing particulate matter of a pharmaceutical active into a pellet mill, the particulate matter being in a first powdered form and having a first granularity;

generating pellets of the particulate matter in substantial absence of fillers, diluents and binders; and

milling the pellets into a second powdered form, whereby the second powdered form of the particulate has a greater granularity than the first granularity.

**Claim 67 (new):** The milled product of claim 66, wherein the particulate matter is selected from the group consisting of particulate matter of whole plants, leaves, roots, dried fruits and active pharmaceuticals.

**Claim 68 (new):** The milled product of claim 67, wherein the particulate matter of whole plant, root, leaf and dried fruit, is particulate matter from a plant selected from the group consisting of Ginkgo, Korean ginseng, Echinacea purpurea, Gota Kola, Valerian Officinalis, Siberian ginseng, Feverfew, Astragalus, Red Raspberry, Foti, Alfalfa, Ginger, Black Cohosh, Cat's Claw, Nettle, St John Wort, Echinacea Angustifolia and Red Clover.

**Claim 69 (new):** The milled product of claim 66, wherein the particulate matter is selected from the group consisting of Ginkgo leaf, Korean Ginseng root, Echinacea Purpurea herb, Gota kola herb, Valerian Officinalis root, Siberian Ginseng root, Feverfew herb, astragalus root, Red Raspberry leaf, Foti root, Alfalfa herb, Ginger root, Black Cohosh root, Cat's claw root, Nettle root, St. John Wort herb, Echinacea Angustifolia root and Red Clover tops.

**Claim 70 (new):** The milled product of claim 66, wherein the milled product is a pharmaceutical, nutritional or herbal product.



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**Claim 71 (new):** The milled product of claim 67, wherein the milled product is a pharmaceutical, nutritional or herbal product.

**Claim 72 (new):** The milled product of claim 68, wherein the milled product is a pharmaceutical, nutritional or herbal product.

**Claim 73 (new):** A process for producing a product in a powderized form comprising:

directing particulate matter into a pellet mill the particulate matter being in a first powderized form and having a first flowability;

generating pellets of the particulate matter in substantial absence of fillers, diluents or binders; and

milling the pellets into a second powderized form, whereby the second powderized form of the particulate matter has a greater flowability than the first flowability.

**Claim 74 (new):** The process of claim 73, wherein the particulate matter is selected from the group consisting of particulate matter of whole plants leaves, roots, dried fruits and active pharmaceuticals.

**Claim 75 (new):** The process of claim 74, wherein the particulate matter of whole plant, root, leaf and dried fruit, is particulate matter from a plant selected from the group consisting of Ginkgo, Korean ginseng, Echinacea purpurea, Gota Kola, Valerian Officinalis, Siberian ginseng, Feverfew, Astragalus, Red Raspberry, Foti, Alfalfa, Ginger, Black Cohosh, Cat's Claw, Nettle, St John Wort, Echinacea Angustifolia and Red Clover.

**Claim 76 (new):** The process of claim 73, wherein the particulate matter is selected from the group consisting of Ginkgo leaf, Korean Ginseng root, Echinacea Purpurea herb, Gota kola herb, Valerian Officinalis root, Siberian Ginseng root, Feverfew herb, astragalus root, Red Raspberry leaf, Foti root, Alfalfa herb, Ginger root, Black Cohosh root, Cat's claw root, Nettle root, St. John Wort herb, Echinacea Angustifolia root and Red Clover tops.

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**Claim 77 (new):** A milled product obtainable by a process for producing a product in a powdered form comprising:

directing particulate matter of a pharmaceutical active ingredient into a pellet mill, the particulate matter being in a first powdered form and having a first granularity;

generating pellets of the particulate matter in substantial absence of fillers, diluents or binders; and

milling the pellets into a second powdered form, whereby the second powdered form of the particulate has a greater granularity than the first granularity.

**Claim 78 (new):** The milled product of claim 77, wherein the particulate matter is selected from the group consisting of particulate matter of whole plants, leaves, roots, dried fruits and active pharmaceuticals.

**Claim 79 (new):** The milled product of claim 78, wherein the particulate matter of whole plant, root, leaf and dried fruit, is particulate matter from a plant selected from the group consisting of Ginkgo, Korean ginseng, Echinacea purpurea, Gota Kola, Valerian Officinalis, Siberian ginseng, Feverfew, Astragalus, Red Raspberry, Foti, Alfalfa, Ginger, Black Cohosh, Cat's Claw, Nettle, St John Wort, Echinacea Angustifolia and Red Clover.

**Claim 80 (new):** The milled product of claim 77, wherein the particulate matter is selected from the group consisting of Ginkgo leaf, Korean Ginseng root, Echinacea Purpurea herb, Gota kola herb, Valerian Officinalis root, Siberian Ginseng root, Feverfew herb, astragalus root, Red Raspberry leaf, Foti root, Alfalfa herb, Ginger root, Black Cohosh root, Cat's claw root, Nettle root, St. John Wort herb, Echinacea Angustifolia root and Red Clover tops.

**Claim 81 (new):** The milled product of claim 77, wherein the milled product is a pharmaceutical, nutritional or herbal product.

**Claim 82 (new):** The milled product of claim 78, wherein the milled product is a pharmaceutical, nutritional or herbal product.

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**Claim 83 (new):** The milled product of claim 79, wherein the milled product is a pharmaceutical, nutritional or herbal product.

